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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,387	02/21/2001	Makoto Suzuki	1046.1243 (JDH)	5408
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STAAS & HALSEY LLP			VILLECCO, JOHN M	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			2622	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/788,387

Applicant(s)

SUZUKI ET AL.

Examiner

John M. Villecco

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7,9-12,14,16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,9,12,14,16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 10, 2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 1, 5, 79, 12, 14, 16, and 18 have been considered but are moot in view of the new ground(s) of rejection. More specifically, applicant's amendment has necessitated the new grounds of rejection presented in the following action. Thus, the arguments pertaining to the previous rejections are not applicable to the newly worded claims.

3. Additionally, the Examiner has made an additional 101 rejection, which was not previously presented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

4. Claims 7, 9, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 7, 9, and 16 are drawn to functional descriptive material recorded on a storage medium. Normally, computer programs stored in a computer readable medium are statutory. However, the specification, at page 28, lines 12-22 defines the claimed computer readable medium as encompassing statutory media such as a "floppy disk", "hard disk", "magneto-optic disk", etc, as well as *non-statutory* subject matter such as a "carrier wave", as discussed on page 28, line 23 to page 29, line 18.

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory.

Additionally, the USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

5. In a separate 101 rejection, claims 7, 9, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 7, 9, and 16 defines a storage medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the

scope of the presently claimed storage medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. More specifically, applicant claims that "the second display area is a configuration of real film". It is not sufficiently clear what is meant by this. Clearly, the second display area can not be in a configuration of real film. In other words, the second display area is not configured of real film. Furthermore, one of ordinary skill in the art would not be enable to make and/or use an invention in which a display monitor is configured using real film. The only section of the applicant's specification which discusses the relationship between the display and real film is page 11, line 23. This section states that the second display area simulates a configuration of real film. As per *In re Wands*, (see section 2164.01 of the MPEP), based on the *In re Wands* factors, the examiner is of the opinion that one of ordinary skill in the art would be forced to undertake undue experimentation in order to make and/or use the invention. Of particular note are factors (C) State of the prior art, (D) The level of one of ordinary skill, (F) The amount of direction provided by the

inventor and (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure. When considering each of these factors, the examiner is of the opinion that one of ordinary skill would not be enabled to make and/or use the invention. For examination purposes it will be assumed that the applicant means that the second display area simulates a configuration of real film.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1, 7, 12, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson (U.S. Patent No. 6,538,698).**

10. Regarding *claim 1*, Anderson discloses a graphical user interface (GUI) for browsing and viewing images stored on a camera. More specifically, and in accordance with applicant's claims, Anderson discloses a display unit (LCD screen, 402) configured with a first display area (704) and a second display area (section of LCD in which the small thumbnails, 700, are displayed, see column 4, lines 52-55), a detecting unit (shutter button, 418) for detecting a photographing instruction, and a generating unit (imaging device, 114) for generating image data when detecting the photographing instruction.

Furthermore, the first display area includes a section (text, 708) for displaying a number of the generated image data.

11. As for **claim 20**, Anderson discloses that the second display area (section of LCD in which the small thumbnails, 700, are displayed) is in a configuration simulating real film. In particular, this arrangement simulates a film strip and the images are presented in a manner consistent with how images captured on film are presented.

12. With regard to **claim 7**, Anderson discloses a graphical user interface (GUI) for browsing and viewing images stored on a camera. More specifically, and in accordance with applicant's claims, Anderson discloses a display unit (LCD screen, 402) configured with a first display area (704), a second display area (section of LCD in which the small thumbnails, 700, are displayed, see column 4, lines 52-55), and a number display area (text, 708) for displaying number of images, a detecting unit (shutter button, 418) for detecting a photographing instruction, and a generating unit (imaging device, 114) for generating image data when detecting the photographing instruction. Furthermore, when a small thumbnail is selected and displaying the first display area (704), the number would inherently be updated to reflect its image number. Furthermore, this is done to be indirectly responsive to the generating of image data since the number of the image data is set at the time of image capture. In addition, Anderson discloses the use of a non-volatile memory (350) that stores computer readable programs for controlling the operation of the camera.

13. **Claim 12** is considered a method claim corresponding to claim 7. Please see the discussion of claim 7 above.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 5, 9, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 6,538,698) in view of Bullock et al. (U.S. Patent No. 5,943,050).**

16. Regarding *claim 5*, as mentioned above in the discussion of claim 1, Anderson discloses all of the limitations of the parent claim. However, Anderson fails to explicitly disclose that the image acquisition device is a device outside of the image photographing system. Bullock, on the other hand, discloses that it is well known in the photography art to connect a remote camera to a computer system and to capture images from the remote camera via the computer system. More specifically, Bullock teaches the use of a camera (118) remotely connected to the computer (100). The user can use the computer display (114) as a viewfinder and capture an image using the picture button (177). Thereafter, the captured images are displayed on the computer display (114). Thus, Bullock teaches that it is well known to capture and display images from a remote image acquisition device. As Bullock teaches, by connecting a digital camera to a computer, a user can harness the power of the computer for storage, image processing, and display. See column 10, lines 20-40 and column 4, lines 20-35. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to connect the camera of Anderson to a computer in order to harness the power of the computer.

17. As for **claim 22**, Anderson discloses the user of a shutter button (418). Bullock teaches connecting a camera (118) to a computer (100) and using the computer (100) to capture an image. In Bullock, one method of capturing the image is by using a touch screen to actuate the picture button (177). See column 5, lines 47-53.

18. **Claim 9** is considered substantively equivalent to claim 5. Please see the discussion of claim 5 on the preceding pages.

19. **Claim 14** is considered substantively equivalent to claim 5. Please see the discussion of claim 5 on the preceding pages.

20. **Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 6,538,698) in view of Terane et al. (U.S. Patent No. 6,734,909).**

21. Regarding **claim 19**, as mentioned above in the discussion of claim 1, Anderson discloses all of the limitations of the parent claim. However, Anderson fails to explicitly disclose that the second display area include the number display area. While the text (708) in Anderson was used to denote the number display area, this area is located in the first display area, not the second as claimed. Terane, on the other hand, discloses that it is well known in the art to include an image number with displayed thumbnail images. See Figures 2A-2C, 5A, 5B, and 6. One of ordinary skill in the art would recognize that the inclusion the image number in the thumbnail images displayed in Anderson would give some context to the displayed thumbnail images. In other words, a user would be

apprised of where in a sequence of captured images the presently viewed thumbnails are located. Therefore, it would have been obvious to one of ordinary skill in the art to include the image number in the thumbnail images of Anderson so the user is apprised of where in the sequence of images they are located.

22. **Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 6,538,698) in view of Schrock et al. (U.S. Patent No. 5,923,908).**

23. Regarding *claim 21*, as mentioned above in the discussion of claim 1, Anderson discloses all of the limitations of the parent claim. However, Anderson fails to explicitly disclose that the display unit comprises a touch panel detecting a user's operation thereto and the screen comprises a button generating the photographic instruction responsive to the users operation to the touch panel. Schrock, on the other hand, discloses that it is well known in the art to use a touch screen in a photographing device in order to capture an image. More specifically, Schrock discloses a camera (20) that has a display (22). The display (22) includes a shutter release activation icon (28) which, when activated by a users finger or a stylus, operates to capture an image. See Figure 2, Figure 4 and column 3, lines 55-63 and column 4, lines 45-68. The use of a touch screen in a photographing device allows for the elimination of the vibration associated with a mechanical shutter button. See column 2, lines 1-8 and column 1, lines 62-68. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a touch sensitive shutter button on the display of Anderson in order to eliminate the vibration associated with mechanical shutter buttons.

24. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyn et al. (U.S. Patent No. 5,859,623) in view of Pavley et al. (U.S. Patent No. 6,317,141).

25. Regarding *claim 18*, Meyn discloses a method for arranging images for presentation during a slideshow. The method and apparatus includes a monitor (see Figure 2) for viewing images to be displayed in the slideshow presentation and for adjusting how the images are presented during the slideshow. The images are displayed in frames. See Figure 5. Additionally, the system (10) provides the user with the ability to move one of the images between the other frames. See column 16, lines 10-30 and column 27, lines 1-30. Furthermore, after the images (slides) are moved, the number of the images is updated. See column 16, lines 27-30.

Meyn, however, fails to disclose that the images for the slideshow presentation are images that have been photographed. Pavley, on the other hand, discloses that it is well known in the art to create a slideshow using images that were captured during photographing operation. More specifically, Pavley discloses that the camera device (100) captures images and then has the ability to create a slideshow from the captured images. See column 10, line 58 to column 11, line 55. Images and captured video are ideal for creating for multimedia presentations, since they capture the image and voice data. See column 2, lines 6-8. Therefore, it would have been obvious to one of ordinary skill in the art to use captured images for the presentation in Meyn as they provide context and personalized data to the user's presentation.

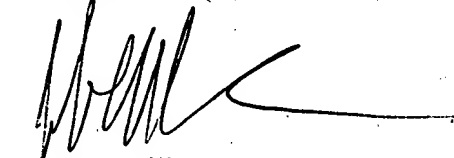
26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Miller et al. (U.S. Patent No. 6,233,015) teaches that the display of thumbnail images in a sequence can be interpreted to be film-like. See column 5, lines 40-58.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John M. Villecco
Primary Examiner, Art Unit 2622
January 29, 2008